

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ronald Scott Bunker et al. : Group Art Unit:
Serial No.: : Examiner:
Filed: :
For COMPONENT AND TURBINE ASSEMBLY :
WITH FILM COOLING :

INFORMATION DISCLOSURE STATEMENT

- ☒ 1 **Pursuant to 37CFR 1.97(b)**
[within 3 months of national, non-CPA filing or prior to 1st Office Action] *no charge*
- ☐ 2 **Certification Pursuant to 37 CFR 1.97(c)(1)**
[before Final Office Action, Allowance, or other action closing prosecution] *no charge*
- ☐ 3 **Fee Payment Pursuant to 37 CFR 1.97(c)(2)**
[before Final Office Action, Allowance, or other action closing prosecution] *\$180.00*
- ☐ 4 **Certification & Fee Payment Pursuant to 37 CFR 1.97(d)**
[On or before issue fee payment] *\$180.00*

ATTN: BOX PATENT APPLICATION
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The following are submitted in the above application in compliance with 37 CFR 1.97 and 37 CFR 1.98:

- ☒ 5 A list of documents on form PTO-1449 or Substitute together with copies of each identified document and a translation thereof or a concise explanation of each non-English language document or a Search Report from an International Searching Authority for a patent application filed via the Patent Cooperation Treaty or document(s) cited in the application or the priority application.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on the date indicated below.

Date of Deposit

Type or Print Name

Signature

This paper is submitted in accordance with:

- ☒ 6 37 CFR 1.97(b): [within 3 months of national, non-CPA filing or prior to 1st Office Action]
- ☐ 7 37 CFR 1.97(c): [before Final Office Action, Allowance, or other action closing prosecution, whichever is earlier]; and
- ☐ 8 The required Certification made in item 11 below; or
- ☐ 9 The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 15 below.
- ☐ 10 37 CFR 1.97(d): [on or before issue fee payment]; and
- a) The required Certification is stated in item 11 below; and
- b) The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 14 below.
- ☐ 11 Certification
- ☐ 12 Each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of this Statement; or
- ☐ 13 No item contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this document after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in 37 CFR 1.56(c) more than three (3) months prior to the filing date of this Statement.
- ☒ 14 Payment of all applicable fees:
- ☒ 15 Please charge all applicable fees associated with the submittal of this Information Disclosure Statement to Deposit Account No. 07-0868

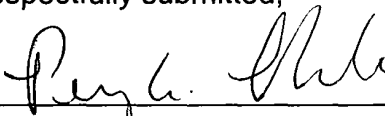
An original and two (2) copies of this document are enclosed.

June 27, 2003

Date

General Electric Company
CRD Patent Docket Rm 4A59
P.O. Box 8, Bldg. K-1
Schenectady, New York 12301
Custom r Number: 006147

Respectfully submitted,



Attorney - Penny A. Clarke
Registration No. 46,627
Phone: (518) 387-5349
or (518) 387-7122

FORM PTO-1449
(REV. 7-80)
(Title Amended 3/83)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

SERIAL NO.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT--

LIST OF ITEMS

(Use several sheets if necessary)

Applicant

Ronald Scott Bunker et al.

Filing Date

Group

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	BA					
	BB					
	BC					
	BD					
	BE					
	BF					
	BG					
	BH					
	BI					
	BJ					
	BK					

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	No
	BL							
	BM							
	BN							
	BO							
	BP							

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

	BR	D. G. Hyams et al., "A Detailed Analysis of Film Cooling Physics: Part III-Streamwise Injection with Shaped Holes," ASME, Volume 122, January 2000, pp. 122-132.
	BS	
	BT	

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered.
Include copy of this form with next communication to applicant.

FORM PTO-1449
(REV. 7-80)
(Title Amended 3/83)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

121278-2

SERIAL NO.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT--

LIST OF ITEMS

(Use several sheets if necessary)

Applicant

Ronald Scott Bunker et al.

Filing Date

Group

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER								DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	6	3	8	3	6	0	2	05/07/02	Fric et al.			
	AB	6	3	6	8	0	6	0	04/09/02	Fehrenbach et al.			
	AC												
	AD												
	AE												
	AF												
	AG												
	AH												
	AI												
	AJ												
	AK												

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER								DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
														YES	No
	AL														
	AM														
	AN														
	AO														
	AP														

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

	AR	Patent Application, Canan U. Hardwicke et al., "Systems and Methods for Determining Conditions of Articles and Methods of Making Such Systems," Serial Number 10/065,816, filed November 22, 2002, Docket Number 120365-1.
	AS	Ronald S. Bunker, "Film Cooling Effectiveness due to Discrete Holes within a Transverse Surface Slot," IGTI Turbo Expo Int. Gas Turbine Conference and Exposition, June 3-6, 2002, Amsterdam, GT-2002-30178, pp. 1-10.
	AT	Masir Hasan et al., "Film Cooling from a Single row of Cylindrical Angled Holes with Triangular Tabs having different Orientations," ASME Turbo Expo 2001, June 4-7, 2001, New Orleans, Louisiana, USA, 2001-GT-0124, pp. 1-8.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.